



Clinical Study Results

This summary reports the results of only one study. Researchers must look at the results of many types of studies to understand if a study medication works, how it works, and if it is safe to prescribe to patients. The results of this study might be different than the results of other studies that the researchers review.

Sponsor: Pfizer Inc.

Medicines Studied: Paxlovid™ (nirmatrelvir [also known as PF-07321332] and ritonavir)

Protocol Number: C4671006

Dates of Study: 09 September 2021 to 12 April 2022

Title of this Study: A Study of 2 Treatment Plans of Nirmatrelvir With Ritonavir Compared to Placebo in Preventing COVID-19 Among Adults Who Lived in the Same House With a Person Who Had COVID-19
[A Phase 2/3, Randomized, Double-Blind, Double-Dummy, Placebo-Controlled Study to Evaluate the Safety and Efficacy of 2 Regimens of Orally Administered PF-07321332/Ritonavir in Preventing Symptomatic SARS-CoV-2 Infection in Adult Household Contacts of an Individual With Symptomatic COVID-19]

Date(s) of this Report: 10 April 2023

– Thank You –

If you participated in this study, Pfizer, the Sponsor, would like to thank you for your participation.

This summary will describe the study results. If you have any questions about the study or the results, please contact the doctor or staff at your study site.

Why was this study done?

What is COVID-19?

Coronavirus disease (COVID-19) led to a global pandemic starting in 2019. COVID-19 is caused by a virus that is easily spread.

People who test positive for COVID-19 can show symptoms such as fever, dry cough, and shortness of breath. This is called symptomatic COVID-19 infection. Other people can test positive for COVID-19, but they do not have symptoms.

People who do not have COVID-19 are more likely to get symptomatic COVID-19 if they live with (household contacts) a person who has COVID-19.

What are nirmatrelvir and ritonavir?

The study medication Paxlovid™ consists of 2 drugs called nirmatrelvir and ritonavir, which are swallowed together.

- Nirmatrelvir (nir-muh-trel-veer) is a study medicine. It can stop a specific type of enzyme in the virus that causes COVID-19 from working. Enzymes are proteins that speed things up in our cells. If this enzyme stops working, the COVID-19 virus cannot multiply and spread through the body.
- Ritonavir (rih-tahn-uh-veer) is a medicine that can help increase the levels of other medicines in the body.

Researchers studied nirmatrelvir/ritonavir to see if it could help prevent symptomatic COVID-19 in participants who have been exposed to the virus through contact with a person in their house who has symptomatic COVID-19.

What was the purpose of this study?

The study aimed to see if nirmatrelvir/ritonavir could prevent symptomatic COVID-19. Participants were living in the same house with a person who has symptomatic COVID-19. At the start of the study, participants had tested negative for COVID-19 and had no COVID-19 symptoms.

Researchers wanted to know:

How many participants taking nirmatrelvir/ritonavir had symptomatic COVID-19 from Day 1 through Day 14 of the study?

Researchers also wanted to find out if nirmatrelvir/ritonavir was safe to take.

What happened during the study?

How was the study done?

Researchers tested nirmatrelvir/ritonavir on a group of study participants. Researchers wanted to find out how many participants taking nirmatrelvir/ritonavir had symptomatic COVID-19.

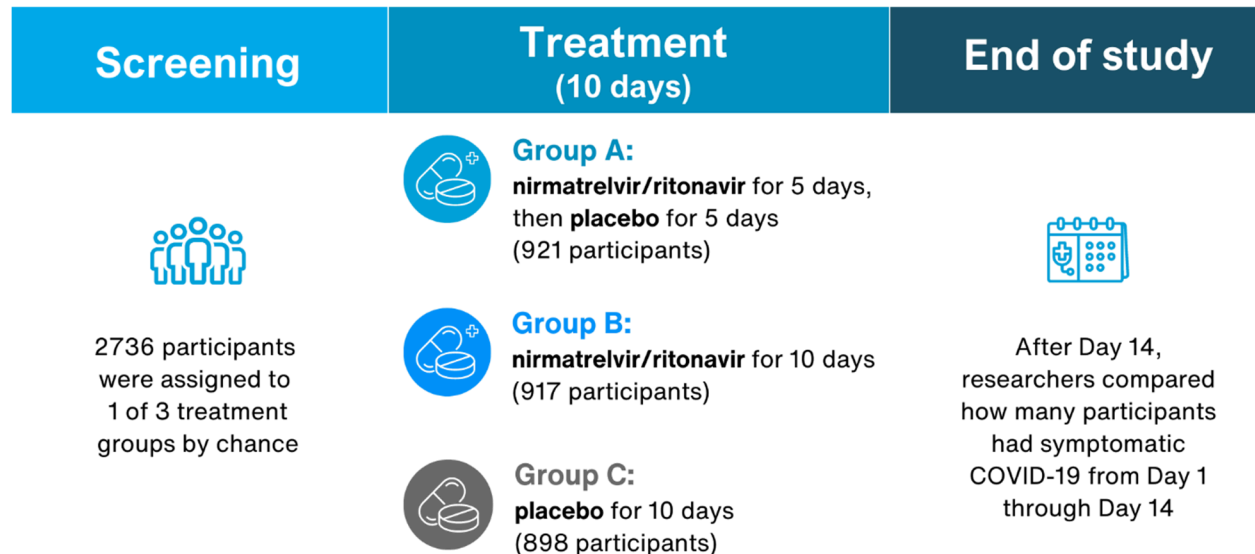
Researchers compared the results of participants taking nirmatrelvir/ritonavir to those from the placebo group. A placebo does not have any medicine in it, but it looks like nirmatrelvir/ritonavir.

The participants and researchers did not know which treatment the participant got. This is known as a “blinded” study.

A total of 2736 participants started the study. The participants were assigned to each group by chance:

- Group A: 921 participants got nirmatrelvir/ritonavir for 5 days followed by a placebo for the next 5 days.
- Group B: 917 participants got nirmatrelvir/ritonavir for 10 days.
- Group C: 898 participants got placebo for 10 days.

Figure 1. Overall study design



Where did this study take place?

The Sponsor ran this study at 150 centers in 17 countries. Countries are in Asia, North and South America, Europe, and Southern Africa.

When did this study take place?

It began 09 September 2021 and ended 12 April 2022.

Who participated in this study?

The study included participants who:

- had tested negative for COVID-19 and had no symptoms of COVID-19 before starting treatment
- were living in the same house with a person who has symptomatic COVID-19
- were at least 18 years old

Among those who entered the study:

- A total of 1281 men and 1455 women participated.
- All participants were between the ages of 18 and 91 years.

Of the 2736 participants who started the study:

- 2579 finished the treatment period.
- 157 participants did not finish the treatment period. The most common reasons for stopping treatment were because they:
 - left the study by their choice.
 - had a medical problem.

Participants were treated for 10 days. They had follow-up visits for about 28 days.

How long did the study last?

Participants were in the study for up to 42 days. The entire study took about 7 months to complete.

The Sponsor reviewed the study results in April 2022 and March 2023. The Sponsor then created reports of the results. This is a summary of those reports.

What were the results of the study?

How many participants taking nirmatrelvir/ritonavir had symptomatic COVID-19 from Day 1 through Day 14 of the study?

The researchers looked at the results of 2514 participants who got at least 1 dose of nirmatrelvir/ritonavir or placebo and had a negative COVID-19 test before getting treatment.

The researchers looked at the results from Day 1 through Day 14 of the study. The researchers checked if the participants tested positive for COVID-19 and reviewed their recorded symptoms within 14 days.

Did nirmatrelvir/ritonavir help prevent symptomatic COVID-19 compared to placebo?

Fewer participants from Groups A and B had symptomatic COVID-19 from Day 1 through Day 14 than those from Group C. The table below shows the results.

Table 1. How many participants had symptomatic COVID-19 from Day 1 through Day 14 of the study?

Group A: Nirmatrelvir/ritonavir for 5 days, then placebo for 5 days	Group B: Nirmatrelvir/ritonavir for 10 days	Group C: Placebo for 10 days
22 out of 844 participants (3%)	20 out of 830 participants (2%)	33 out of 840 participants (4%)

The researchers found that:

- Participants in Group A were 30% less likely to have symptomatic COVID-19 than those in Group C.
- Participants in Group B were 36% less likely to have symptomatic COVID-19 than those in Group C.

While participants who were treated with nirmatrelvir/ritonavir (Groups A and B) were less likely to have symptomatic COVID-19 compared to those who were treated with placebo (Group C), the difference between treatments was small and likely due to chance.

This does not mean that everyone in this study had these results. This is a summary of just some of the main results of this study. Other studies may have different results.

What medical problems did participants have during the study?

The researchers recorded any medical problems the participants had during the study. Participants could have had medical problems for reasons not related to the study (for example, caused by an underlying disease or by chance). Or, medical problems could also have been caused by a study treatment or by another medicine the participant was taking. Sometimes the cause of a medical problem is unknown. By comparing medical problems across many treatment groups in many studies, doctors try to understand what effects a study medication might have on a participant.

The researchers reviewed the medical problems in 2721 participants who got at least 1 dose of nirmatrelvir/ritonavir or placebo.

Overall, 625 out of 2721 participants (23%) had at least 1 medical problem.

- Group A: 218 out of 912 participants (24%)
- Group B: 212 out of 911 participants (23%)
- Group C: 195 out of 898 participants (22%)

No participants left the study because of medical problems. Table 2 shows the most common medical problems – those reported by 2% or more participants in any treatment group.

Below are instructions on how to read Table 2.

Instructions for Understanding Table 2.

- The **1st** column of Table 2 lists the most common medical problems reported during the study. It lists all medical problems reported by 2% or more participants in any treatment group.
- The **2nd** column tells how many of the 912 participants in Group A reported each medical problem. Next to this number is the percentage of the 912 participants in Group A who reported the medical problem.

- The **3rd** column tells how many of the 911 participants in Group B reported each medical problem. Next to this number is the percentage of the 911 participants in Group B who reported the medical problem.
- The **4th** column tells how many of the 898 participants in Group C reported each medical problem. Next to this number is the percentage of the 898 participants in Group C who reported the medical problem.
- Using these instructions, you can see how many participants had a change in the sense of taste:
 - 54 out of the 912 participants (6%) in Group A.
 - 62 out of 911 participants (7%) in Group B.
 - 6 out of the 898 participants (1%) in Group C.

Table 2. Most common medical problems reported in the study

Medical problem	Group A: nirmatrelvir/ritonavir for 5 days, then placebo for 5 days (912 participants)	Group B: nirmatrelvir/ritonavir for 10 days (911 participants)	Group C: placebo for 10 days (898 participants)
Change in the sense of taste	54 out of 912 participants (6%)	62 out of 911 participants (7%)	6 out of 898 participants (1%)
COVID-19	27 out of 912 participants (3%)	26 out of 911 participants (3%)	36 out of 898 participants (4%)
Loose stools	23 out of 912 participants (3%)	22 out of 911 participants (2%)	15 out of 898 participants (2%)
Infected nose, sinuses, or throat	20 out of 912 participants (2%)	17 out of 911 participants (2%)	18 out of 898 participants (2%)

Medical problem	Group A: nirmatrelvir/ritonavir for 5 days, then placebo for 5 days (912 participants)	Group B: nirmatrelvir/ritonavir for 10 days (911 participants)	Group C: placebo for 10 days (898 participants)
Headache	15 out of 912 participants (2%)	17 out of 911 participants (2%)	29 out of 898 participants (3%)
A longer time than usual for blood to form a clot (prolonged activated partial thromboplastin time)	11 out of 912 participants (1%)	14 out of 911 participants (2%)	22 out of 898 participants (2%)
Increase of marker of blood clot breakdown in blood (Fibrin D dimer)	18 out of 912 participants (2%)	13 out of 911 participants (1%)	4 out of 898 participants (less than 1%)

Did study participants have any serious medical problems?

A medical problem is considered “serious” when it is life-threatening, needs hospital care, or causes lasting problems.

In total, 6 out of 2721 participants (less than 1%) had a serious medical problem.

- Group A: 3 out of 912 participants (less than 1%)
- Group B: 1 out of 911 participants (less than 1%)
- Group C: 2 out of 898 participants (less than 1%)



COVID-19 lung infection (pneumonia) was the most common serious medical problem reported in the study. It was reported by 1 participant in each group.

The other serious medical problems in the study were:

- Road accident and a broken bone in the leg in 1 participant from Group A.
- Inflamed gall bladder in 1 participant from Group A.
- Overdose in 1 participant from Group C that was later determined not to be a serious medical problem.

No participants died during the study.

Where can I learn more about this study?

If you have questions about the results of your study, please speak with the doctor or staff at your study site.

For more details on your study protocol, please visit:

www.pfizer.com/research/research_clinical_trials/trial_results Use the protocol number **C4671006**

The full scientific report of this study is available online at:

www.clinicaltrials.gov Use the study identifier **NCT05047601**
www.clinicaltrialsregister.eu Use the study identifier **2021-002894-24**

Please remember that researchers look at the results of many studies to find out which medicines can work and are safe for patients.

Again, if you participated in this study,
thank you for volunteering.
We do research to try to find the
best ways to help patients, and you helped
us to do that!